



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,203	12/03/2001	Won-Sik Cheong	P67366US0	4417
43569	7590	11/15/2006	EXAMINER	
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			BOTTS, MICHAEL K	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/998,203	CHEONG ET AL.	
	Examiner	Art Unit	
	Michael K. Botts	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a Final Office Action on the merits. This action is responsive to the following communication: Amendment, which was filed on August 28, 2006.
2. Claims 1-16 are currently pending in the case, with claims 1, 15, and 16 being the independent claims.
3. Claims 1-16 are rejected.

Claims Objections

4. **Claim 16** is objected to for the following informality: The section of the claims are out of order, being designated as " a first program instruction" followed by " a fourth program instruction" followed by "a second program instruction."

Appropriate correction is required.

Claims Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hubbell, et al. (U.S. Patent 5,966,121, issued October 12, 1999) [hereinafter "Hubbell"]**.

Regarding **independent claim 1, as amended**, Hubbell teaches:

An apparatus for authoring multimedia contents with object-based interactivity, which comprises:

a user interfacing unit for providing an interface to thereby edit object-based interactive multimedia contents by using a multimedia information editing and authoring tool;

an editorial information processing unit for converting the multimedia contents supplied from the user interfacing unit on an object basis to the form applicable to an object-based internal material structure supporting the editorial information authoring, storing the converted contents, and changing the form of the interactive multimedia contents information stored as the internal material structure to the file form so as to perform an input or output process of the contents; and

a media coding and decoding unit for encoding and decoding the interactive multimedia contents information provided from the editorial information processing means.

(The invention is claimed in broad functional terms of a multi-media editor.

Hubbell teaches the invention claimed for a user interface to an editorial means with a media input and output for authoring multimedia content with object-oriented interactivity. See, Hubbell, col. 1, line 5 through col. 52, line 34.

See, Hubbell, col. 26, line 21 through col. 47, line 58, teaching the "object-oriented hypervideo system implementation. Specifically, see, Hubbell, col. 26,

Art Unit: 2176

lines 28-42, teaching that "Object-oriented programming is a process of developing computer software using object An object is a software package that contains both data and a collection of related procedures. * * * Object-oriented programming, therefore, views a computer program as a collection of largely autonomous components, called objects, each of which is responsible for a specific task."

See also, Hubbell, figures 5-8, and col. 3, lines 19-35, teaching a user interface means.

See also, Hubbell, claims 1, 21, and 32, teaching the interface with input and output of video displays.

See also, Hubbell, abstract, teaching object-oriented design as the preferred embodiment.

More specifically, the claim limitation is for "an editorial information processing unit for converting the multimedia contents . . . to an object based internal material structure supporting the editorial information authoring, storing the converted contents, and changing the form of the interactive multimedia contents . . . so as to perform an input of output of the contents." This claim limitation specifies essentially an editor with the capability of storing the edits and playing them back. The object based contents are changed during the editing process.

See, Hubbell, col. 4, lines 44-55, and col. 26, line 21 through col. 47, line 58, teaching that the invention provides editing controls to edit the multimedia. Specifically, see, Hubbell, col. 4, lines 50-55, stating: "The hypervideo controls,

Art Unit: 2176

actions and functions as described hereinbelow provide the multimedia author a means for rapidly and intuitively composing a digital video interface that seamlessly incorporates a multiplicity of video, audio, text, graphics, and animation files, among others, in an orchestrated navigable manner.” See also, Hubbell, col. 11, lines 28-31, teaching that the edits of the multimedia may be stored.)

Regarding **dependent claim 2, as amended**, Hubbell teaches:

The apparatus as recited in claim 1, wherein the user interfacing unit includes:

an interface for inserting or deleting media objects and editing properties characterizing each media object;

an interface for editing a logical relationship between the media objects;

an interface for editing the spatial allocation for the media objects;

an interface for editing the time allocation for the media objects;

an interface for editing the user interactivity for the media objects;

and

an interface for displaying information for media objects under editing.

(See, Hubbell, figures 5-8, and col. 2, line 65 through col. 3, line 35, teaching the user interface with functionality for editing logical, spatial, time, and user

Art Unit: 2176

interactivity for the media objects, and for displaying information for media objects under editing.)

Regarding **dependent claim 3, as amended**, Hubbell teaches:

The apparatus as recited in claim 2, wherein, through the user interactivity unit that a user can manipulate a position of a media object, a display starting time of the media object and a display ending time of the media object during displaying edited and authored interactive multimedia contents.

(See, Hubbell, figures 1-23, and col. 18, line 40 through col. 23, line 42, teaching user interactivity to manipulate position, starting and ending times and display of interactive multimedia contents.)

Regarding **dependent claim 4, as amended**, Hubbell teaches:

The apparatus as recited in claim 1, wherein the user interfacing unit is implemented by an interface capable of editing exact values by utilizing a keyboard, a graphic user interface (GUI), or both of said two interfaces.

(See, Hubbell, figures 1-23, and col. 18, line 40 through col. 23, line 42, teaching use of a GUI and a keyboard for the user interface.)

Art Unit: 2176

Regarding **dependent claim 5, as amended**, Hubbell teaches:

The apparatus as recited in claim 1, wherein the editorial information processing unit includes:

a data access application program interface for performing information exchange with the user interfacing unit;

an object editorial information processor for converting the multimedia editorial information supplied from the outside to the form applicable to the internal material structure and storing the converted multimedia editorial information;

an object-based internal material structure for reading in the object-based interactive multimedia contents stored in a storage to thereby preserve said contents as internal materials, and storing editing and authoring information inputted from the outside as internal materials to thereby edit and author current contents; and

a file input and output processor for performing an input and output process of edited and authored results related to the storage and carrying out the form conversion between the internal materials and input and output files.

(See, Hubbell, figures 1-23, and col. 18, line 40 through col. 23, line 42, teaching data access, conversion of outside data, reading data in storage, storing, and file input and output of data.)

Art Unit: 2176

Regarding **dependent claim 6**, Hubbell teaches:

The apparatus as recited in claim 5, wherein the object editorial information processor contains:

a time allocation editorial information processing module for processing editorial information related to the time allocation of each media object;

a spatial allocation editorial information processing module for processing editorial information for the spatial allocation of each media object;

a user interactivity editorial information processing module for processing editorial information for the user interactivity; and

a property and logical structure editorial information processing module for processing editorial information for properties characterizing each media object.

(See, Hubbell, figures 1-23, and col. 18, line 40 through col. 23, line 42, teaching user interactivity to manipulate position, starting and ending times and display of interactive multimedia contents.

See also, Hubbell, Figures 1-23, and col. 18, line 40 through col. 23, line 42, teaching spatial allocation.

See also, Hubbell, figures 1-23, and col. 18, line 40 through col. 23, line 42, teaching use of a GUI and a keyboard for the user interface.

Art Unit: 2176

See also, Hubbell, figures 9-23, and col. 18, line 40 through col. 23, line 42, teaching a module for processing editorial information for properties characterizing each media object.)

Regarding **dependent claim 7**, Hubbell teaches:

The apparatus as recited in claim 6, wherein the object editorial information processor further contains an object description information processing module for examining whether information for managing and searching media objects is proper or not, storing said information as internal materials and converting the object description information stored in the internal material structure to the form that the outside can refer to.

(It is noted that an “object description information processing module” is disclosed as a module to check in the putting “editorial information” for proper form, and, if not in proper form, for converting the data to the proper form. See, disclosure, page 11, line 26 through page 12, line 6. Further, it is noted that “editorial information” is defined as including time, spatial, user interactivity, property, and logical structure information. See, disclosure, page 12, lines 7-19.

See, Hubbell, col. 10, line 54 through col. 11, line 27, teaching the importation and modification of various formats of multimedia, with modification to the invention taught.)

Art Unit: 2176

Regarding **dependent claim 8**, Hubbell teaches:

The apparatus as recited in claim 6, wherein the object editorial information processor performs the editorial information processing for a higher level authoring, a lower level authoring and the higher and lower level authoring.

(See, Hubbell, col. 4, lines 33-55, col. 10, lines 4-17, and col. 11, lines 28-36, teaching higher and lower levels of editing as "passive" and "enhanced" editing controls.)

Regarding **dependent claim 9**, Hubbell teaches:

The apparatus as recited in claim 5, wherein the object-based internal material structure supports internal materials for a higher level authoring, those for a lower level authoring and those for the higher and lower level authoring.

(See, Hubbell, col. 4, lines 33-55, col. 10, lines 4-17, and col. 11, lines 28-36, teaching higher and lower levels of editing as "passive" and "enhanced" editing controls.)

Regarding **dependent claim 10**, Hubbell teaches:

The apparatus as recited in claim 5, wherein the file input and output processor contains:

a file analyzing module for reading in the object-based interactive multimedia contents stored in the storage, storing the contents in the

Art Unit: 2176

object-based internal material structure and examining errors of the contents by analyzing the contents; and
a file generating module for transferring edited and authored results of the object-based interactive multimedia contents stored in the object-based internal material structure to the storage.

(See, Hubbell, col. 26, line 19 through col. 52, line 34, teaching specifically object-oriented implementation, including storing the contents.

See also, Hubbell, col. 47, Table 49, teaching checking files loaded from existing files for errors.)

Regarding **dependent claim 11**, Hubbell teaches:

The apparatus as recited in claim 10, wherein the file input and output processor further contains a form converting module for performing the form conversion between the internal material structure and the input and output form.
(See, Hubbell, col. 47, Table 50, teaching conversion module.)

Regarding **dependent claim 12**, Hubbell teaches:

The apparatus as recited in claim 11, wherein the form converting module changes a higher level authoring result to a lower level authoring result when the editing and authoring tool provides the higher and lower level authoring, and converts the edited and authored contents to the higher level file form which is not supported by the editing and authoring tool.

Art Unit: 2176

(See, Hubbell, col. 4, lines 33-55, col. 10, lines 4-17, and col. 11, lines 28-36, teaching higher and lower levels of editing as “passive’ and “enhanced” editing controls, and changes between the states.)

Regarding **dependent claim 13, as amended**, Hubbell teaches:

The apparatus as recited in claim 1, wherein the media coding and decoding unit includes:

a pre-post processor for performing a prior process and a post process required for the media coding and decoding;

a media coder for encoding media data so as to produce a media stream; and

a media decoder for decoding a media stream to reproduce media data.

(See, Hubbell, col. 26, line 19 through col. 47, line 59, teaching pre- and post-process decoding of a media stream to produce media data.)

Regarding **dependent claim 14**, Hubbell teaches:

The apparatus as recited in claim 13, wherein the media coder or decoder further contains a media processing accelerator, which is hardware, dedicated for performing the media coding and decoding in real-time or a higher speed than real-time.

(See, Hubbell, figures 5-7 and 9, and col. 19, line 25 through col. 21, line 39, teaching the graphical user interface, GUI, with real time editing.)

Regarding **independent claim 15, as amended**, Hubbell teaches:

An object-based interactive multimedia contents authoring method for use in an object-based interactive multimedia contents authoring apparatus, comprising the steps of:

securing a new internal material structure and a new authoring space on a user interface, and receiving a plurality of parameters or initializing the authoring space to preset defaults;

converting multimedia contents supplied from a user on an object basis to the form applicable to an object-based internal material structure supporting editorial information authoring;

authoring object-based interactive multimedia contents by inserting and deleting media objects based on the initialized authoring space and editing the user interactivity on an object basis and properties of objects;
and

storing the authored object-based interactive multimedia contents in a binary or text form.

(Claim 15 incorporates substantially similar subject matter as claimed in claim 1 and, in further consideration of the following, is rejected along the same rationale.

See, Hubbell, figures 9-10, and col. 4, lines 44-49, teaching the mark video file which is associated with the object based editing programs. The mark video file is converted from the user supplied object and is "marked" to create the form of the data used in the object based editing.

Art Unit: 2176

See, Hubbell, col. 26, line 21 through col. 47, line 58, teaching the “object-oriented hypervideo system implementation for editing.”)

Regarding **independent claim 16, as amended**, Hubbell teaches:

A computer readable medium on which a program used in implementing an object-based interactive multimedia contents authoring apparatus employing a processor is recorded, comprising:

a first program instruction unit for securing a new internal material structure and a new authoring space on a user interface, and receiving a plurality of parameters or initializing the authoring space to preset defaults;

a fourth program instruction for converting multimedia contents supplied from a user on an object basis to the form applicable to an object-based internal material structure supporting editorial information authoring;

a second program instruction unit for authoring object-based interactive multimedia contents by inserting and deleting media objects based on the initialized authoring space and editing the user interactivity on an object basis and properties of objects; and

a third program instruction unit for storing the authored object-based interactive multimedia contents in a binary or text form.

(Claim 16 incorporates substantially similar subject matter as claimed in claim 1 and, in further consideration of the following, is rejected along the same rationale.

Art Unit: 2176

See, Hubbell, figures 9-10, and col. 4, lines 44-49, teaching the mark video file which is associated with the object based editing programs. The mark video file is converted from the user supplied object and is "marked" to create the form of the data used in the object based editing.

See, Hubbell, col. 26, line 21 through col. 47, line 58, teaching the "object-oriented hypervideo system implementation for editing.)

6. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

Response to Arguments

Applicants' arguments filed August 28, 2006 have been fully considered, but they are not persuasive.

Regarding rejections of claims 1-14:

FIRST: Applicants argue that the reference, Hubbell, "clearly does not convert multimedia contents to any internal structure, let alone an "object based" internal structure." See, Amendment, page 10.

The Examiner disagrees.

See, Hubbell, col. 26, line 21 through col. 47, line 58, teaching the "object-

Art Unit: 2176

oriented hypervideo system implementation. Specifically, see, Hubbell, col. 26, lines 28-42, teaching that "Object-oriented programming is a process of developing computer software using object An object is a software package that contains both data and a collection of related procedures. * * * Object-oriented programming, therefore, views a computer program as a collection of largely autonomous components, called objects, each of which is responsible for a specific task."

SECOND: Applicants argue that the reference, Hubbell, "does not disclose an editorial information processing unit for 'changing the form of the interactive multimedia contents information stored as the internal material structure to the file form'." See, Amendment, page 11.

The Examiner disagrees.

More specifically, the claim limitation is for "an editorial information processing unit for converting the multimedia contents . . . to an object based internal material structure supporting the editorial information authoring, storing the converted contents, and changing the form of the interactive multimedia contents . . . so as to perform an input of output of the contents." This claim limitation specifies essentially an editor with the capability of storing the edits and playing them back. The object based contents are changed during the editing process.

See, Hubbell, col. 4, lines 44-55, and col. 26, line 21 through col. 47, line 58, teaching that the invention provides editing controls to edit the multimedia. Specifically, see, Hubbell, col. 4, lines 50-55, stating: "The hypervideo controls,

Art Unit: 2176

actions and functions as described hereinbelow provide the multimedia author a means for rapidly and intuitively composing a digital video interface that seamlessly incorporates a multiplicity of video, audio, text, graphics, and animation files, among others, in an orchestrated navigable manner.” See also, Hubbell, col. 11, lines 28-31, teaching that the edits of the multimedia may be stored.

Regarding rejection of claims 15 and 16:

Applicants argue that the reference, Hubbell, fails to teach or suggest “that multimedia content provided by a user be converted into an internal object-based format.” See, Amendment, page 11.

The Examiner disagrees.

The cited limitation is more completely stated as “converting multimedia contents supplied from a user on an object basis to the form applicable to an object-based internal material structure supporting editorial information authoring. See, claim 15. The conversion is not to “an internal object-based format” as argued by Applicants, but rather “converting . . . to the form applicable to an object-based internal material structure supporting editing.”

See, Hubbell, figures 9-10, and col. 4, lines 44-49, teaching the mark video file which is associated with the object based editing programs. The mark video file is converted from the user supplied object and is “marked” to create the form of the data used in the object based editing.

Art Unit: 2176

See, Hubbell, col. 26, line 21 through col. 47, line 58, teaching the "object-oriented hypervideo system implementation for editing.

Therefore, there is a conversion of the original data into a form used by the object based editor within which the data is edited as an object.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** for the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Botts whose telephone number is 571-272-5533. The examiner can normally be reached on Monday through

Art Unit: 2176

Friday 8:00-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKB/mkb


Heather R. Herndon
Supervisory Patent Examiner
Technology Center 2100